

system. Additionally, the inventive base station has an identification device, which is arranged for calculating the exactly one hopping sequence which is to be used for communicating with a mobile unit, using the stored base hopping sequence and the information of an identity of the base station.

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This means, that all mobile units and all base stations in an inventive scenario have exactly the same base hopping sequence stored, and that, depending on a base station identity information, a certain specific hopping sequence, which is used by the base station (and the associated mobile unit) is derived from the base hopping sequence using the base station identify by means of a certain calculation.

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As to a detailed example of how the exactly one hopping sequence used, for communicating is derived from the base hopping sequence and the base stations identity, please refer to amended Claim 8, which is supported by page 15, lines 18-25 of the application as originally filed.

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Contrary thereto, the prior art system disclosed in document D1 discloses a base station having a base station ID generating circuit 222 (Fig.4), a hopping pattern ID table (226) and a frequency hopping pattern table 221 (Fig. 4). As it is outlined for example in column 10, lines 15-13, and as it also becomes clear from Fig. 4, the hopping pattern table has several hopping patterns. Using a certain base station identifier, one hopping pattern identifier is retrieved from the hopping pattern ID table. This retrieved hopping pattern ID table which is related to a base station identifier, is then, fed to the hopping pattern table so that the synthesizer is switched to a new frequency according to the hopping pattern corresponding to the received hopping pattern ID.

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Therefore. The prior art teaches to provide a hopping pattern table in each system, and to select a certain hopping pattern based on a base-station identity.

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Contrary thereto, in accordance with the present invention, each base station and each mobile unit has stored a base hopping sequence, wherein, in response to receipt of a base station ID, each device calculates its own hopping sequence using the base hopping sequence and the information on an identity of the base station.

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Document D1 neither anticipates nor renders obvious the inventive concept.

The inventive concept is advantageous in that mobile units and abase stations can be produced cheaper, since the storage place for storing a single base hopping sequence is much smaller than storing a huge frequency hopping pattern table in each device, in particular in larger communication systems, where a lot of difference sequences are required.

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On the other hand, each device, i.e. each base station and each mobile unit has a processor for other reasons than hopping pattern generation so that the task of calculating a certain hopping pattern based on the base hopping pattern and the base station identification information can be performed without any extra costs.

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Additionally, the inventive concept provides more flexibility in production on the one hand and in use on the other hand. Imagine the situation, when prior art base stations and mobile units are distributed over a certain area and when a new hopping pattern table is to be distributed to all devices because of any reason. Then, this will take a lot of time, since a huge table has to be transmitted via the wireless channel to each and every device.

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On the other hand, the inventive device is advantageous in that only a small single base hopping sequence has to be communicated to each device.

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1. Accordingly Claims 1-2, 5, 8-10, 13,14, 16, 17 and 19 are deemed to be in condition for allowance. Claims 12 and 18 have been cancelled.

2. Claims 3,4,6, 11 and 15 are rejected under 35 U.S.C. § 103 for obviousness in view of various combinations of references. In view of applicant's remarks above and the allowability of the independent claims herein, the rejections of dependent claims for obviousness is demoot.

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ALLOWABLE SUBJECT MATTER

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The applicant thanks the Examiner for indication of allowable subject matter within Claim 7. Applicant submits herewith new Claim 20 which contains the subject matter of Claim 7, rewritten in independent form including all the limitations of the base claim and any intervening claims.

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CLAIM OBJECTIONS

Applicant has amended Claim 13 as required by the Examiner.

In view of the foregoing, the application is deemed to be in allowable condition and an early indication of allowance would be appreciated. Should the Examiner deem it helpful, he is encouraged to contact applicant's attorney, Michael A. Glenn at (650) 474-8400.

Respectfully submitted,

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